**SCIENCE & SOCIAL STUDIES AREA-SPECIFIC SKILLS**

**SCIENCE:**

1. **Observe carefully in order to gather data**
2. **Use a variety of instruments and tools to measure data accurately**
3. **Use scientific vocabulary to explain observations and experiences**
4. **Identify or generate a question or problem to be explored**
5. **Plan and carry out systematic investigations, manipulating variables as necessary**
6. **Make and test predictions**
7. **Interpret and evaluate data gathered in order to draw conclusions**
8. **Consider scientific models and applications of these models**

**SOCIAL STUDIES**

1. **Formulate and ask questions about the past, the future, places and society**
2. **Use and analyse evidence from a variety of historical, geographical and societal sources**
3. **Orientate in relation to place and time**
4. **Identify roles, rights and responsibilities in society**
5. **Assess the accuracy, validity and possible bias of sources**

**SCIENCE-SPECIFIC SKILLS**

1. **Observe carefully in order to gather data** (for example, students will examine objects and living things to find out more about them; observe and manipulate objects by using all their senses as appropriate; observe changes in living things, objects and events over a period of time; distinguish between significant and less significant observations; record observations in a systematic way).
2. **Use a variety of instruments and tools to measure data accurately** (for example, students will use a range of tools and techniques with increasing competency; use standard and non-standard units for measurement; measure, compare and record data including mass, weight, time and temperature; select appropriate tools and measurement units).
3. **Use scientific vocabulary to explain their observations and experiences** (for example, students will talk about what is observed; describe simple features of objects and events; describe what is happening using an increasing scientific vocabulary; record and present findings and conclusions using a variety of strategies and appropriate scientific vocabulary).
4. **Identify or generate a question or problem to be explored** (for example, students will ask questions or show curiosity about the natural and physical environment; ask questions or identify problems that may lead to investigations; pose questions and define problems that will facilitate effective investigations or inquiries).
5. **Plan and carry out systematic investigations, manipulating variables as necessary** (for example, students will identify variables; collect information and data from a range of sources; suggest approaches and methods for solving problems; identify one or two variables relevant to an investigation; recognize the way in which an experiment is unfair if the relevant variables are not controlled; reflect on methods used in investigations and their effectiveness).
6. **Make and test predictions** (for example, students will observe similarities and differences; guess and suggest what will happen next in structured situations; based on prior learning and/or observations, suggest outcomes of an investigation; make justified predictions; propose ideas or simple theories that may be explored or tested).
7. **Interpret and evaluate data gathered in order to draw conclusions** (for example, students will sort and classify according to observable features or selected criteria; look for and recognize patterns in observations; compare results of different investigations; interpret information and offer explanations).
8. **Consider scientific models and applications of these models** (including their limitations) (for example, students will share findings with peers informally; represent findings using pictures and models; reflect on and build upon their own current scientific theories and applications; apply scientific knowledge to reconstruct or refine their understandings of the physical, chemical and biological worlds; assess their understanding in light of new data or reconsideration of existing data).

**SOCIAL STUDIES SKILLS**

1. **Formulate and ask questions about the past, the future, places and society** (for example, students will express wonderings, show curiosity or ask questions about a person or event of personal significance; express wonderings, show curiosity or ask questions about the natural and physical environment; ask questions to extend understanding of how others have constructed or represented the past, the human and natural environment and society; formulate questions and identify problems that will enable them to make links between prior learning, new situations and further actions; formulate questions that promote the transfer of knowledge and make connections across their learning).
2. **Use and analyse evidence from a variety of historical, geographical and societal sources** (for example, students will draw information from, and respond to, stories about the past from geographical and societal sources; access a broad range of first- and second-hand sources of information such as people, maps, surveys, direct observation, books, museums and libraries; identify appropriate information and communication technology (ICT) tools and sources of information to support research; predict future events by analysing reasons for events in the past and present).
3. **Orientate in relation to place and time** (for example, students will explore and share instances of change and continuity in personal lives, family and local histories; investigate directions and distances within the local environment; distinguish between past, present and future time; explore similarities and differences between the past and the present; sequence events, routines, personal histories in chronological order; interpret place and time using tools such as maps and timelines).
4. **Identify roles, rights and responsibilities in society** (for example, students will define own roles and responsibilities within the family, class or school; compare children’s and adults’ roles, rights and responsibilities in society; reflect on the rights and responsibilities of children in other societies and make comparisons; examine how the rights of a person directly affect their responsibilities; investigate how services and systems influence societal rights and responsibilities; examine the responsibility of people towards the environment; reflect on opportunities to contribute actively to the community at a range of levels, from local to global).
5. **Assess the accuracy, validity and possible bias of sources** (for example, students will examine and interpret simple evidence such as artifacts; compare the validity of statements from a variety of different sources; distinguish between fact and opinion; piece together evidence to explain, report or persuade; analyse and synthesize information; make predictions in order to test understanding; develop a critical perspective regarding information and the reliability of sources).